

ATHLETIC TRAINERS

Health Care For The Physically Active

Certified athletic trainers are health care professionals who specialize in the prevention, evaluation and rehabilitation of injuries to athletes and those engaged in physical activity. Athletic trainers administer emergency care for acute sports injuries and rehabilitate chronic injuries.

Certified athletic trainers contribute to a cost-effective health care system by emphasizing injury prevention and injury evaluations that prevent unnecessary trips to emergency rooms and unnecessary x-rays. Through aggressive rehabilitation, they focus on restoring patients' good health and ability to participate.

Certified athletic trainers work with: secondary school interscholastic athletic programs, intercollegiate athletic programs, professional athletic teams, corporate health programs, sports medicine clinics, physicians' offices, health clubs and industrial health programs.

The National Athletic Trainers' Association, Inc. (NATA) is the largest organization representing athletic trainers. NATA Board of Certification certified athletic trainers have met educational and experiential requirements and have passed a competency examination. Certified athletic trainers use the credentials ATC.

Athletic training is an allied health care profession recognized by the American Medical Association. Athletic training programs are accredited by the AMA's Commission on Accreditation of Allied Health Education Programs. Programs include courses in orthopedic evaluation, immediate care, therapeutic exercise, injury prevention/risk management and therapeutic modalities among others.

Certified athletic trainers practice the art and science of athletic training under the direction of a licensed physician.

RehabWorks

TO MINIMIZE PAPER COSTS,
PLEASE ROUTE THIS NEWSLETTER TO ALL EMPLOYEES AT THIS MAIL STOP.

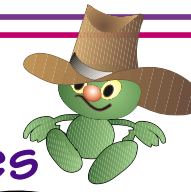


Working Together to Launch a New You
Synergy
KSC FITNESS CENTER

March/April 2001



KSC Fitness
Center Activities



April National Humor Month



March

March is
National
Nutrition
Month!

Raspberry Chicken Salad - 7% Fat

2 cans white chicken packed in water
1 cup shredded bib lettuce
1 cup shredded spinach
1 cup shredded iceberg lettuce
1 cup shredded romaine lettuce
1 cup raspberries, unsweetened
1/3 cup finely chopped celery
2 cups fat free plain yogurt
1/2 cup raspberries
1 Tablespoon red wine vinegar
2 teaspoons sugar

- 1) Drain chicken
- 2) In large bowl, combine all greens, chicken, 1 cup raspberries and celery. Toss together and chill for one hour.
- 3) In separate bowl, combine yogurt, 1/2 cup raspberries, vinegar and sugar. Mix with electric mixer for 1 to 2 minutes on high. Sauce should be creamy.
- 4) Pour yogurt mixture over salad just before serving.

Makes 4 servings; per serving:
250 calories, 2 fat grams

Try this low fat recipe to spice up
one of your favorite sandwich fillers!

"Foot Care and Exercise" presented by The Athletic Department.

Are you having a hard time finding the proper pair of shoes for exercising? Do you have a previous foot or ankle injury that always seems to haunt you right in the middle of your favorite activity?



This Lunch and Learn will discuss proper shoe fitting, injury prevention, proper exercises, and how to care for specific foot and ankle injuries.

There will be a Q&A period to help you with those "aching" questions. Call 867-7829 for the location and to sign up.

"Fit to a Tee" This is a 4-week fitness challenge starting April 2nd through April 27th. This program will help you safely improve your fitness level and establish a solid exercise routine.

By the end of the program you will have completed 72 fitness activities and be well on your way to mastering your exercise plan.



THERE'S HUMOR....EVEN IN GROWING OLD

Recently, the New York Times printed an anonymous letter about growing old. The sentiments in it are simple, and they encourage some good-humored laughter about a process that we will all go through, (or are going through). **ENJOY!**

- Middle age is when work is a lot less fun - and fun a lot more work.
- Middle age is when it takes longer to rest than to get tired.
- By the time a man is wise enough to watch his step, he's too old to go anywhere.
- Middle age is when you have stopped growing at both ends and have begun to grow in the middle.



- Middle age is having a choice of two temptations and choosing the one that will get you home earlier.
- You know you're into middle age when you realize that caution is the only thing you care to exercise.
- Doctor to patient: I have good news and bad news - the good news is that you are not a hypochondriac.
- You know you're getting old when you stop buying green bananas because it's too risky of an investment.
- There are three signs of old age...

The first is one's loss of memory,
.....the other two I forget!

Source: New York Times Syndicate, January 10, 2001



WEBSITE: <http://fitness.ksc.nasa.gov>



The Most Important Nutrient

Water

By: Lauren Chadwick,
East Carolina University Intern

A significant number of Americans may be drinking themselves to dehydration by consuming too little water and too many beverages that rob the body of water, such as coffee, sodas and alcohol. Water makes up 70% of the human body. Besides oxygen, it is the most important nutrient in the body, functioning as a physiological “jack of all trades.” It has an important role in nearly every major function in the body, regulating body temperature, carrying nutrients and oxygen to cells, removing waste, cushioning joints and protecting organs and tissues.

The body cools itself much like the cooling system of an automobile, and water plays an important role in this. As muscles produce the energy needed for training and competition, they generate heat. This heat, in turn, causes your body temperature to rise. Blood picks up heat from the muscles and carries it to the skin’s surface, where it is lost as sweat evaporates. Sweat is your body’s main method for cooling itself. As you sweat, you lose water, which must be replaced if you want to perform your best. Losing as little as 2 to 3 percent of your weight via sweat can cause a decrease in concentration, coordination, strength and stamina. More importantly, if lost water is not replaced, your body begins to conserve water by slowing the sweating and thus, the cooling process.

Water helps you control your energy level and weight, which allows you to perform better. Water helps fight fatigue by keeping the body in its best shape. It can also be a valuable and easily adaptable component of a diet plan. Water acts as an appetite suppressant and is an instructional component in breaking down and reducing fat deposits. Drinking water maintains hydration and helps performance by keeping you more mentally alert when the body has full components of water.

Nine tips for maintaining proper hydration according to Cornell Medical Center:

1. Drink at least 8 - 8oz servings of water each day.
2. Don't wait until you're thirsty to drink water. Thirst is not a good indicator that the body needs water. Thirst is an indicator of dehydration, waiting until you're thirsty is too late.
3. Drink plenty of water throughout the day. Try carrying a water bottle with you.
4. Don't substitute coffees, teas, sodas and alcoholic drinks for water. These drinks act as diuretic, causing you to lose water through increased urination.
5. Once you start exercising, don't stop drinking. Keep a bottle of water with you and take frequent water breaks.
6. Don't underestimate the amount of fluids lost from perspiration. You need to drink two cups of water for each pound lost following a workout.
7. Start and end your day with a serving of water. Your body loses water while you sleep.
8. Don't forget that common illnesses such as colds and the flu can frequently lead to dehydration.
9. Remember that when it's warm outside, cold water - not sport drinks or carbonated soft drinks - is the best fluid for keeping hydrated. Cool water is absorbed much more quickly than warm fluids and may have a positive effect on cooling off your overheated body.

Sources: www.water.com, www.bidness.com, and www.exsends.com,
Encyclopedia of Health and Aging.

Check Your Pulse To Burn That Fat!



Many people begin and maintain cardiovascular exercise programs without really knowing what they are or are not accomplishing. There is a method that can tell you how hard to exercise and what that exercise will accomplish.

Target heart rates are rates that one sets to achieve certain results from your cardiovascular workout. The recommended range is between 50 to 70 percent of your maximum heart rate. Your maximum heart rate is calculated with testing or more often by using mathematical formulas. One formula is 220 minus your age. The result of that equation is a maximum age predicted heart rate. For example a 30 year old would use $220 - 30 = 190$. So 190 beats per minute would be the maximum predicted heart rate.

Another method is the Karvonen Method. The formula is:
(percent desired x (Max Age Predicted HR - resting HR) + Resting HR

For example: a 30 year old with a resting heart rate of 70, who wanted to workout at 65 percent of their maximum heart rate would be;

$$(.65 \times ((220 - 30) - 70) + 70 \text{ would equal } (.65 \times 120) + 70$$

which would give you 148 beats per minute.

If this person exercised at a heart rate of 148 they would be exercising at 65 percent of their maximum predicted heart rate.

So, why do we need to know the percentage of maximum heart rate to workout?

The heart rate has a direct relationship on the fuel that your body utilizes during exercise. At about 50 to 65% of heart rate maximum is the range that utilizes the most fat for fuel. The ranges above that are utilized more for improving aerobic fitness and they tend to use more protein (lean mass) for fuel. The American Heart Association recommends staying within 50 to 75% of your maximum heart rate.

So how do I count my heart rate while exercising? The best and easiest way is with the use of a heart rate monitor. It is usually comprised of a wireless strap that goes across your chest and a watch like receiver. Good monitors are priced from around 50 dollars up to hundreds for the ones with all the bells and whistles. Most are water-resistant so that they can be used while swimming. Much of today's cardiovascular exercise equipment is equipped to receive information from your transmitter.

Another way to monitor your heart rate is to find your pulse on your carotid artery, located in your neck, or your radial pulse, located in your wrist. The neck seems to be the easiest and fastest to locate and is usually strong. The wrist is sometimes too weak and moving too much to gain a reliable reading. So remember to calculate your target heart rate so that you can gain the results that you desire from your cardiovascular workouts.

Remember to always consult your physician before beginning a new exercise program.

Source: ACSM Guidelines for Exercise Testing and Prescriptions

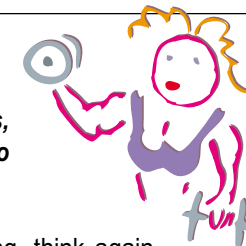
Ask Miss Muscle

Q: Occasionally I feel tightness, discomfort, even pain in my hips, thighs, calves and shins after working out? Is there a way to prevent this from happening!

A: Yes - STRETCH!! If you think stretching takes too long, think again.

It doesn't take any more time than drinking an 18-ounce glass of water, going to the rest room, or having a casual conversation in the hallway with a friend. I'm sure you've heard it before but it's so true, "If you don't take time to care for yourself now, you will have to take time to be sick later." Take your pick.

Your next excuse is, "It hurts to stretch. I really dislike stretching." The reevaluate how you're stretching. Take a look below at some of these great stretches to prevent injuries. After all, if you get injured, it not only prevents you from staying with your program- losing weight, building mass, or toning up- but it also affects you mentally. Mild depression, moodiness, weight gain/loss, and lack of energy are just a few.



Tips on Stretching:

1. Hold each stretch for at least 20-30 seconds up to a minute.
2. Stretch to the point of "slight tension," never to the point of pain or discomfort. At first you may feel the stretch in another area of your body, that's ok! As you practice stretching, you will become more aware of your body.
3. Never bounce a stretch, this pulls on tendons and muscles and triggers a stretch response or contraction that can lead to injury.
4. Avoid holding your breath, continue to breathe regularly and relax into the stretch.

Another Success Story



Trish Bauer, Kent Beringer, Kelly Gjermo,
Elbert Marti, Jean McNair, Chris Rose, Leslie Shinault, Curtis Wood



We came back from the Christmas holidays last year feeling fat, bloated, and just plain gross! Everyone had definitely overindulged and weighed A LOT more than they wanted to weigh. Since everyone felt the same, we decided to make some changes. We came up with a weight loss incentive competition. We would weigh in every Friday and whoever lost the most weight that week didn't have to pay. Everyone else had to pay \$0.25 a pound for every pound different from the winner. This worked pretty well for about 4-5 months, but since we didn't set any personal goals, we soon lost interest in the whole thing.

Around July, we all needed to get back on track, so we decided to try the competition again. This time we set a firm end date, divided up into two teams (men vs. women), and set personal goals as well as team goals. The men's goal was to lose 28 pounds collectively and the women set a goal of 25 pounds, all to be lost by Labor Day. Now that we had teams and goals, it became much more fun. We could see which people were motivated and those who were just "talk" and no "walk"! As the Labor Day deadline arrived, both teams met and exceeded their goals; the men lost 38 pounds collectively and the women lost 25 pounds. But these goals were not reached without some serious measures being taken! These extreme measures included one person going on a nine-day fast and another person taking a long run in heavy clothes!

As this competition drew to a close, we realized that we were better off for having lost the weight, but the methods used to get there were not the best for our health! Thus, the final phase of our competition was born. The medical community has long advocated a balance of weight control AND physical exercise as the best plan for a healthy lifestyle. Out of the eight people in our department, only two participated in formal exercise on a regular basis. This was going to be a challenge! We decided to divide into teams again, but this time each team had two men and two women. This competition would not focus on weight, but fitness. Knowing that muscle weighs more than fat, we decided to measure body fat and waist size, and steer away from the weight factor. Body fat reduction depends on physical exercise, so we thought counting the amount of exercise time would help us meet this goal. Starting the middle of September, we decided to make this competition run until the end of the year.

Each team member went to the O&C Fitness Center and had their fitness evaluations recorded and then after seven weeks of consistent training, we went back and had them reevaluated. Each team had lost exactly the same percentage of body fat. At the end of the 14 weeks, we had reduced our body fat by a total of 20%, each team had exercised an average of 11 hours a week, and we had lost 3 inches overall in waist size. We have maintained the weight loss within a pound or two and now everyone is on some type of exercise program on a regular basis.

Deciding to embark on any type of weight loss or exercise program is always hard. You can think up a million excuses why you can't exercise. We discovered that competition was a good motivator for our group. By building a support system within our group, it made it a lot easier to commit to losing weight or starting a workout program. If you can't generate interest within your group, at least find a workout partner. Having someone close to you that will hold you accountable definitely helps to keep you motivated. Another tremendous help was all the resources available from the Fitness Center. Not only do they have the machines, they have a very supportive and knowledgeable staff available to help you with any type of fitness question. The enthusiastic staff has really helped us tailor our exercise program to get the best results Three of us have taken advantage of the FREE personal trainer appointments, with much success!!

